

REMARKS

STATUS OF THE CLAIMS

Applicants have canceled claim 46 and entered new claim 70 in its place. Applicants have also amended claims 47, 52, 54, 57, 58, 59 and 67 to correct dependency. Applicants assert that the amendments to the claims do not introduce new matter.

THE SPECIFICATION FULLY SUPPORTS THE CLAIMED INVENTION

Written Description

The Office Action of 11 August 2009 rejected claims 46, 47, 52, 54, 57-59 and 67 under 35 U.S.C. §112, first paragraph, because the specification allegedly failed to describe the scope of the claimed invention. Applicants respectfully disagree.

In making the written description rejection, the Office stated that, as written, the claims read on an “unlimited number of mutations that makes the protein having no structural feature.” *Office Action of 11 August 2009*, page 4. Applicants have canceled claim 46 and have added new claim 70 to better capture the envisioned commercial embodiments and assert that the amendments to the claims render moot the written description rejection. Specifically, new claim 70 specifies the precise location of each mutation, and, as such, claim 70 is not open ended and does not read on an “unlimited number of mutations that makes the protein having no structural feature.” Applicants assert that the specification fully supports recombinases containing the listed mutations. Applicants respectfully request reconsideration and withdrawal of the written description rejection.

Enablement

The Office Action of 11 August 2009 rejected claims 46, 47, 52, 54, 57-59 and 67 under 35 U.S.C. §112, first paragraph, because the specification allegedly failed to enable the full scope of the claimed invention. Applicants respectfully disagree.

In making the enablement rejection, the Office stated that the specification is fully enabling for recombinases “mutated at G101 or at a position corresponding to G101 of Tn3 resolvase of SEQ ID NO 2, wherein said serine recombinase contains additional mutations at positions selected from the group consisting of L105, V107, A117, A89, F92, L66, G70, M76, T109 and R121.” Applicants have canceled claim 46 and have added new claim 70 to better capture the envisioned commercial embodiments and

assert that the amendments to the claims render moot the enablement rejection. Specifically, new claim 70 specifies the precise location of each mutation. Applicants assert that the specification and the state of the art at the time of filing would enable the full scope of claim 70 as written. Applicants assert that the specification fully supports recombinases containing the listed mutations. Applicants respectfully request reconsideration and withdrawal of the enablement rejection.

INDICATION OF ALLOWABLE SUBJECT MATTER

Applicants thank the Examiner for the indication of allowable subject matter with respect to claim 4.

CONCLUSION

Applicants have canceled claim 46 and replaced it with claim 70 to better capture the envisioned commercial embodiments. Applicants assert that the specification fully supports the entire scope of the claimed invention. Applicants request reconsideration and withdrawal of the description and enablement rejections.

Should the Examiner believe that further discussion of any remaining issues would advance the prosecution, he or she is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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